

March 1874. *Dr. Peters, Discovery of Planet (135).* 271

Observation of Faye's Comet (Comet VI. 1873.) By Dr. C. H. F. Peters.

As there have been no observations of Faye's Comet published, except those made at Marseilles, I have to communicate the following position, the only one that I have obtained :—

1873, Dec. 23	Mean Time			R.A.	Decl.
	Hamilton Coll.	h m s	h m s		° ' "
	14 10 29		9 18 19.68		-2 15 4.4

The Comet was observed with a ring-micrometer, and the observed place is the mean result of twelve comparisons with a Star whose position is well determined. It was necessary for the air to be very pure to allow the Comet to be seen, and consequently the observation is not so satisfactory as we could have wished. However, the comparison of the observed place with the ephemeris of Dr. Axel Möller gives the following differences :

Calculation—Observation.

$$\text{R.A.} = -0^{\circ}37 \quad \text{Decl.} = +16^{\circ}5$$

which confirms the testimony of the observations at Marseilles as to the general accuracy of the ephemeris of Dr. Möller. (*Bulletin International*, March 20, 1874.)

Discovery of Minor Planet (135). By Dr. C. H. F. Peters.

(Extract from a Letter to the Astronomer Royal.)

The telegraph will have duly announced the discovery of Asteroid (135) on February 18. Since that date, on account of the weather, I have obtained only one more observation, and have not yet had the opportunity for determining accurately the place of the comparison-star of the first night. The observations are as follow :—

1874	Hamilton			R.A. (135)	Decln. (135)	Number of Comp.
	Coll. M.T.	h	m			
Feb. 18	14 37 49	11	19	42.7	+ 4 25 5	12
,, 24	13 24 45	11	14	36.47	+ 4 53 3.6	10

The planet was compared on February 18 with an anonymous star of the eleventh magnitude, and on February 24 with W.B. (1) xi. 233. The notice given by the telegram of the planet's motion being nearly parallel to the Equator must be modified, as the daily motion is in reality between four and five minutes north. The magnitude was estimated at 11.2.

*Litchfield Observatory,
Hamilton College, Clinton, N.Y.,
1874, February 26.*

Discovery and Elements of Comet I., 1874.

This Comet was discovered by Dr. Winnecke, at Strasburg, in the night of February 20-21, and the observed approximate place, determined from a comparison with a star of the 9th magnitude in the *Bonn Durchmusterung*, $+26^\circ$. No. 3954, was found to be—

	Mean Time at Strasburg.			R.A.			N.P.D.
	d	h	m	h	m	s	$^\circ$
1874, February 20	16	0		20	35	0	63 55

From later observations on the same morning, using $27 Vulpeculae$ as the comparison-star, the place of the Comet was—

	Mean Time at Strasburg.			R.A.			N.P.D.	Number of Comp.		
	d	h	m	s	h	m	s	$^\circ$	"	
1874, February 20	17	16	40.6		20	35	34.10	63 59	15.2	5

Dr. Winnecke observed the Comet also on the two following days, the observed places being—

	Mean Time at Strasburg.			R.A.			N.P.D.	Number of Comp.		
	d	h	m	s	h	m	s	$^\circ$	"	
1874, February 21	17	11	2.7		20	44	29.44	65 25	9.2	6
„ „ 22	16	31	6.6		20	53	10.58	66 53	21.7	8

The mean places of the comparison-stars for 1874.0 are—

	R.A.			N.P.D.	Washington 12-y. Cat.
	h	m	s	$^\circ$	
February 20	20	31	42.06	63 58 31.0	
„ 21	20	42	40.97	65 49 28.2	Bessel
„ 22	20	54	23.43	66 52 47.4	Arg. vol. vi.

The following elements of the Comet have been computed by Dr. Schulhof, of Vienna, from the observations made at Strasburg on February 20, at Pola and Vienna on February 23, and at Pola and Vienna on February 25—

$$T = 1874, \text{ March } 9.95342.$$

$$\begin{aligned} \pi &= 300 36 4.2 \\ \Omega &= 31 31 18.2 \\ i &= 58 17 14.5 \end{aligned} \left. \right\} \text{ Mean Equinox, 1874.0.}$$

$$\log. q = 8.642852$$

A comparison with the mean observed place gives the following errors :

$$\Delta \lambda \cos \beta = + 3''.1$$

$$\Delta \beta = - 8''.2$$